Backstage Communication System

User Manual

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1 General Description

The TheatreCom backstage communications system is a professional talkback system allowing the backstage crew to communicate discreetly without interfering with the performance on stage. The product is designed for temporary or permanent installations and allows up to 8 crew members to speak over a wired intercom.

A TheatreCom installation consists of a mains-powered **base station** and up to 7 **remote units**, connected by TheatreCom communications cables. Base stations and remote units are supplied with a single ear headset although other headphones/microphones can be used provided they meet the **technical specification** (see below).

All TheatreCom products are provided with a comprehensive one year warranty. In addition, Top Hex offers a lifetime repair guarantee. In the event of a failure of the product for any reason, Top Hex commits to repair the product at a nominal cost. In the unlikely event that the product cannot be repaired, a refurbished product of similar specification will be offered at a special price.

2 Safety

To reduce the risk of electrical shock, do not remove the cover on this product. There are no user serviceable parts inside. Removing the cover invalidates the warranty.

The TheatreCom backstage communications system is designed for indoor use as described in this manual. Using this product for any other purpose other than that for which it was designed many cause harm and will invalidate the warranty.

If you are unsure about the safe operation of this product, contact Top Hex for advice. Contact details are provided at the end of this manual.

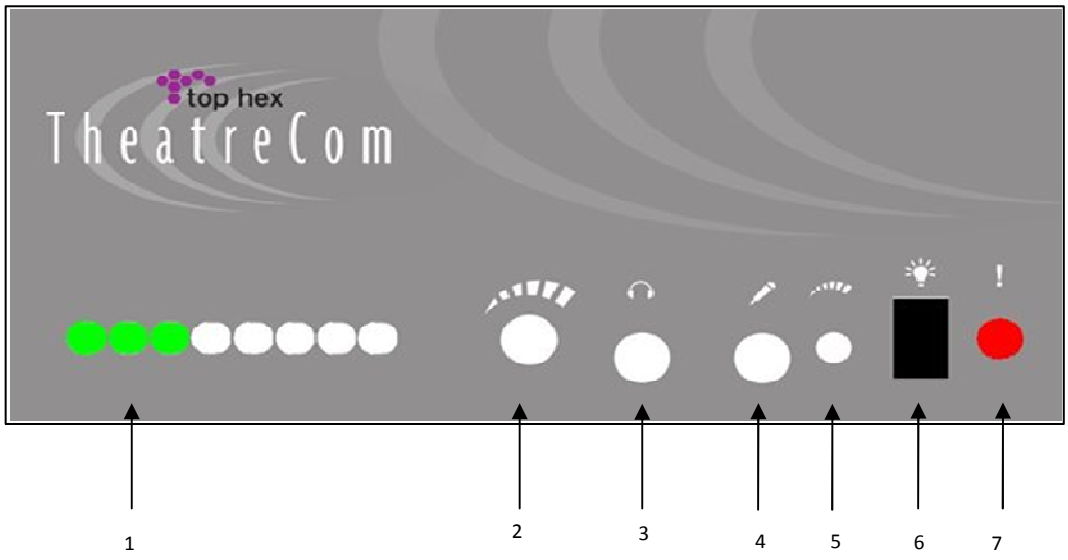
3 Unpacking

Top Hex takes great care to ensure your TheatreCom backstage communication system reaches you in perfect condition. After unpacking, please check for any damage to the unit, retaining any packing materials should the unit need to be returned.

On receipt, please ensure that the package is complete. A list of parts supplied which each package or kit is detailed in the **Product Range** section of this manual.

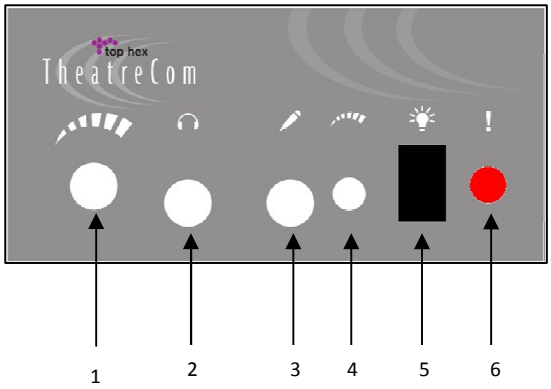
4 Front Panels

4.1 Base Station



1. Volume Indication
2. Headphone Volume
3. Headphone Socket
4. Microphone Socket
5. Microphone Level
6. Call Button
7. Call Indication

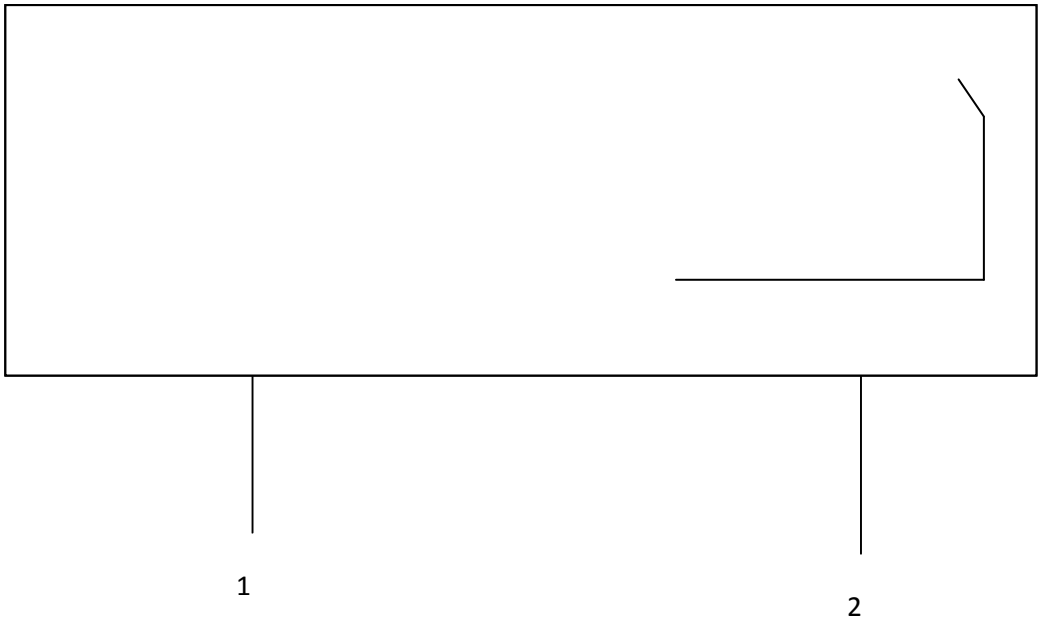
4.2 Remote Unit



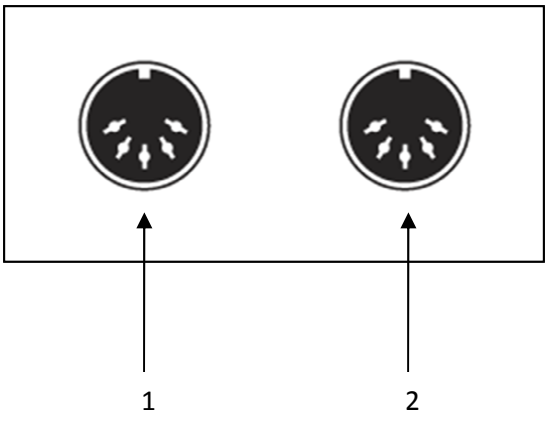
1. Headphone Volume
2. Headphone Socket
3. Microphone Socket
4. Microphone Volume
5. Call Button
6. Call Indication

5 Rear Panels

5.1 Base Station



5.2 Remote Unit

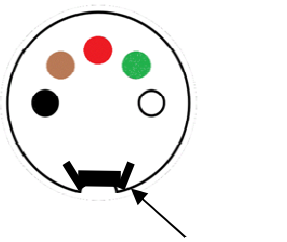


nications Port
nications Port

6 TheatreCom Communication Cables

The cables for your TheatreCom backstage communication system have a 5-way DIN socket at either end. Although these appear similar to MIDI cables, MIDI cables are not compatible as they do not have all pins connected. Cables can be purchased from Top Hex in standard lengths, custom lengths or you can make up your own.

Rear View



6.1 XLR Cabling

Male and female 3 pin XLR adapters are available allowing your TheatreCom backstage communication system to use existing wiring. You would normally need a male XLR adapter at one end of the link and a female XLR adapter at the other end. The XLR adapters plug directly into the back of the **base station** and **remote** units. Please note, two XLR cables are required for each link.

7 Installation

Before installing a full TheatreCom backstage communications system, it is worth setting up a small system on your desk first. This will allow you to test the cables and get the levels approximately right before the system is used.

1. Plug your mains cable into the **base station** and power on. Press the call button to illuminate the red LED and prove the **base station** is powered up.

2. Connect your headset, ensuring the microphone and headphones are plugged into the correct sockets. Ensure the plugs are pushed fully home into the sockets. Use a screwdriver to set the microphone level such that talking in a normal voice illuminates the green level LEDs with the red level LEDs only illuminating occasionally.

3. Set the headphone volume to a comfortable level.

4. Connect a second headset to a **remote unit**, then connect the **remote unit** using a **TheatreCom intercom cable**.

5. Set the microphone level on the **remote unit** by checking at the LEDs on the **base station.** Microphone levels on the base stations can be tweaked later while the full system is being tested.

6. Add further **remote units** as required.

8 Troubleshooting

1. The sound through the headphones is crackling or distorted.

(i) Check headphone/microphone is plugged in correctly
(ii) The microphone level may be too high – check the level LEDs on the **base station.**

2. Base Station appears to be working but there is no sound on one or more remote stations.

(i) Check the cabling – this is almost always at fault. Set up a test system on your bench to prove that the **remote units** are working and then add them one by one to the installation. Top Hex can supply you with a short TheatreCom test cable if required.

3. The call button does not illuminate any or all of the call LEDs on the remote stations.

(i) This is most likely a cabling issue, check the cabling.

4. A base station or remote unit has failed.

(i) Return the unit to Top Hex for repair. Top Hex offer a lifetime repair service for this product. Please use the original packaging.

9 Product Range

Part:	Description:	Contents:
TC-2	Basic TheatreCom backstage intercom kit	• TC-B base station with mains lead • TC-RB remote unit with belt clip (both supplied with TC-H headsets) • TC-C10 TheatreCom cable
TC-4	Enhanced TheatreCom backstage intercom kit	• TC-B base station with mains lead • 3 x TC-RB remote unit with belt clip (all supplied with TC-H headsets) • 1 x TC-C25 cable • 2 x TC-C10 cables
TC-XLR	TheatreCom to XLR conversion kit	TheatreCom to 2 x XLR male adapter TheatreCom to 2 x XLR female adapter
TC-B	Base Station	Base Station including: • mains power supply lead • TC-H headset
TC-R	Remote Unit	Remote unit without belt clip including: • TC-H headset
TC-RB	Remote Unit with Belt Clip	Remote unit with belt clip including: • TC-H headset
TC-C1	1m Communications Cable	1m TheatreCom intercom cable for linking base station/remote unit or two remote units.
TC-C5	5m Communications Cable	5m TheatreCom intercom cable
TC-C10	10m Communications Cable	10m TheatreCom intercom cable
TC-C25	25m Communications Cable	25m TheatreCom intercom cable
TC-C50	50m Communications Cable	50m TheatreCom intercom cable
TC-C custom	Custom Cable	(cables can be supplied in custom lengths)
TC-H	Headset	Combined headset and microphone

10 Technical Specifications

Base Station:	
Supply Voltage:	230Vac
Supply Current:	< 1A
	The mains plug must be fitted with a 3A fuse to protect the system
Microphone:	Electret condenser, nominally 2.2KΩ
Headphone:	Nominally 32Ω, 100mW
Microphone/Headphone socket:	3.5mm mono/stereo jack
Dimensions:	135mm(w) x 60mm(h) x 116mm(d)
Weight:	580g
Remote Units:	
Maximum remote units per system:	7
Maximum cable length between units:	100m
Maximum system cable length:	500m
Microphone:	Electret condenser, nominally 2.2KΩ
Headphone:	Nominally 32Ω, 100mW
Microphone/Headphone socket:	3.5mm mono/stereo jack
Dimensions:	85mm(w) x 40mm(h) x 67mm(d)
Weight:	120g
Cable:	
Specification:	Pro Power MCOS5C24100M Available from www.farnell.co.uk part number: 125-1761 Screened Cable MUST be used.
Connector:	5 way DIN Plug Available from www.rapidonline.co.uk part number: 20-0305

11 Guarantee

This TheatreCom product is warranted by Top Hex Ltd to the original end-user purchaser against defects in workmanship and materials in its manufacture for a period of one year from the date of shipment to the end-user.

Faults arising from misuse, unauthorised modifications or accidents are not covered by this warranty. If the TheatreCom product is faulty, it should be sent in its original packaging to Top Hex Ltd at the address below, with shipping prepaid. Please include details of the fault found and a copy of the supplier's invoice.

To reduce the risk of electrical shock, do not remove the cover on this TheatreCom product. There are no user serviceable parts inside. Removing the cover invalidates the warranty.

A life-time repair service is offered on this product; please contact Top Hex for details.

TheatreCom
Top Hex Ltd
5 Ramsay Court
Hinchingbrooke Business Park
Huntingdon
PE29 6FY

www.theatrecom.co.uk